ABSTRACT OF THE DISCLOSURE

A method for detecting a potential race condition is provided comprising the steps of identifying a memory access in a source code segment, the source code segment being executable in any one of a plurality of execution threads; searching backward from the memory access through each of the plurality of threads for an assert protection declaration without any intervening deassert protection declaration, and identifying the potential race condition if the assert protection declaration without any intervening deassert protection declaration was not found in each of the plurality of threads; and searching forward from the memory access through each of the plurality of threads for the deassert protection declaration, and identifying the potential race condition if the deassert protection declaration was not found in each of the plurality of threads.